

WHAT IS CLAIMED IS:

1. A fiber optic connector for mounting to a cable having a plurality of optical fibers and optically connecting the optical fibers to mating optical fibers, wherein the optical fibers and the mating optical fibers have termini mounted to respective ends thereof, the fiber optic connector comprising:

5 a housing defining an exterior of the fiber optic connector and having a rear portion to which the cable is secured and through which the plurality of optical fibers enter the connector;

a support member having a shank which is engaged with a retainer ring and which is disposed within the housing extending between the rear portion of the housing and a forward portion of the housing with a gap disposed between the housing and the shank through which the optical fibers extend; and

10 a recess which is disposed in the forward portion of the housing and has an interiorly disposed periphery which defines a recess profile, the recess profile having inner portions which receive the termini of the optical fibers.

2. A fiber optic connector in accordance with claim 1, further including electrical contacts for mounting to electrical conductors included in the cable and extending through the gap between the housing and the shank.

3. A fiber optic connector in accordance with claim 1, wherein the retainer ring further includes an edge periphery which defines a retainer profile having outward portions and inward portions, the inward portions being defined for receiving the termini of the optical fibers.

4. A fiber optic connector in accordance with claim 3, wherein the recess profile and the retainer profile are formed such that the retainer profile fits within the recess profile in a keyed arrangement, thereby angularly aligning the retainer ring with the recess.

5. A fiber optic connector in accordance with claim 1, wherein the shank is dimensioned to allow the optical fibers to wrap around the shank with a bend radius which is not less than the predetermined minimum bend radius for the optical fibers.

6. A fiber optic connector in accordance with claim 1, wherein the gap between the housing and the shank is dimensioned to allow the optical fibers to wrap around the shank with sufficient slack between the cable and the termini to allow for rebuilding one of the termini without requiring all of the termini within the connector to be rebuilt.

7. A fiber optic connector in accordance with claim 6, further including electrical contacts for mounting to electrical conductors included in the cable and extending through the gap between the housing and the shank, the conductors wrapping around the shank with the optical fibers with sufficient slack between the cable and the contacts to allow for rebuilding one of the contacts and termini without requiring all of the contacts and termini within the connector to be rebuilt.

8. A fiber optic connector in accordance with claim 6, wherein the retainer ring further includes an edge periphery which defines a retainer profile having outward portions and inward portions, the inward portions being defined for receiving the termini of the optical fibers.

9. A fiber optic connector in accordance with claim 8, wherein the recess profile and the retainer profile are formed such that the retainer profile fits within the recess profile in a keyed arrangement, thereby angularly aligning the retainer ring with the recess.

10. A electrical connector for mounting to a cable having a plurality of electrical conductors and electrically connecting the electrical conductors to mating electrical conductors, wherein the electrical conductors and the mating electrical conductors have contacts mounted to respective ends thereof, the electrical connector comprising:

5 a housing defining an exterior of the electrical connector and having a rear portion to which the cable is secured and through which the plurality of electrical conductors enter the connector;

10 a support member having a shank which is engaged with a retainer ring and which is disposed within the housing extending between the rear portion of the housing and a forward portion of the housing with a gap disposed between the housing and the shank through which the electrical conductors extend; and

a recess which is disposed in the forward portion of the housing and has an interiorly disposed periphery which defines a recess profile, the recess profile having inner portions which receive the contacts of the electrical conductors.

11. An electrical connector in accordance with claim 10, further including termini for mounting to optical fibers included in the cable and extending through the gap between the housing and the shank.

12. An electrical connector in accordance with claim 10, wherein the retainer ring further includes an edge periphery which defines a retainer profile having outward portions and inward portions, the inward portions being defined for receiving the contacts of the electrical conductors.

13. An electrical connector in accordance with claim 12, wherein the recess profile and the retainer profile are formed such that the retainer profile fits within the recess profile in a keyed arrangement, thereby angularly aligning the retainer ring with the recess.

14. An electrical connector in accordance with claim 10, wherein the gap between the housing and the shank is dimensioned to allow the electrical conductors to wrap around the shank with sufficient slack between the cable and the contacts to allow for rebuilding one of the contacts without requiring all of the contacts within the connector to be rebuilt.

15. An electrical connector in accordance with claim 14, further including termini for mounting to optical fibers included in the cable and extending through the gap between the housing and the shank, the optical fibers wrapping around the shank with the electrical conductors with sufficient slack between the cable and the termini to allow for rebuilding one of the contacts and
5 termini without requiring all of the contacts and termini within the connector to be rebuilt.

16. An electrical connector in accordance with claim 14, wherein the retainer ring further includes an edge periphery which defines a retainer profile having outward portions and inward portions, the inward portions being defined for receiving the contacts of the electrical conductors.

17. An electrical connector in accordance with claim 16, wherein the recess profile and the retainer profile are formed such that the retainer profile fits within the recess profile in a keyed arrangement, thereby angularly aligning the retainer ring with the recess.

18. A fiber optic connector for mounting to a cable having a plurality of optical fibers and optically connecting the optical fibers to mating optical fibers using termini, the fiber optic connector comprising:

5 a housing defining an exterior of the fiber optic connector, a forward portion of the housing defining a rear facing recess and a rear portion of the housing allowing entry of the optical fibers into the connector;

10 a support member extending from the rear portion of the housing into the recess, the support member having a shank which extends between the recess and a rear portion of the support member, the shank being centrally disposed within the housing and defining an annular gap between the shank and the housing through which the optical fibers extend; and

the recess having a periphery which defines a recess profile, the recess profile having inner portions which receive the termini of the optical fibers.

19. A fiber optic connector in accordance with claim 18, wherein the shank is dimensioned to allow the optical fibers to wrap around the shank with a bend radius which is not less than the predetermined minimum bend radius for the optical fibers.

20. A fiber optic connector in accordance with claim 18, wherein the annular gap between the housing and the shank is dimensioned to allow the optical fibers to wrap around the shank with sufficient slack between the cable and the termini to allow for rebuilding one of the termini without requiring all of the termini within the connector to be rebuilt.